

7-1-2017

# Differences Between Students with and without Disabilities in College Counseling

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## Abstract

This study examined differences between college students with and without disabilities who utilized college counseling center services. Although we found no differences between students with ( $n = 234, 9.2\%$ ) and without ( $n = 2,308, 90.8\%$ ) disabilities on number of counseling sessions attended, significant findings included: students with disabilities were more likely to self-terminate and more likely to be referred out than students without disabilities. Results suggest that students with disabilities are a diverse group requiring special consideration in college counseling settings. Recommendations for college counseling practice are discussed.

*Keywords:* College counseling, disability, diversity, multicultural counseling

Over the past decade, college counseling centers have reported increased demand and increased symptom severity among students seeking psychological services (Locke, Bieschke, Castonguay, & Hayes, 2012). Utilization tracking and outcome evaluation have become necessary to prove the utility of college counseling centers and improve the ability of centers to serve clients (American Psychological Association [APA], 2005; Goodheart, Kazdin, & Sternberg, 2006). The International Association of Counseling Services ([IACS], 2010) standards state that “an integral responsibility of the counseling service is to conduct ongoing evaluation and accountability research, to determine effectiveness, and to improve the quality of services” (p. 5). Furthermore, ethical codes of psychology, social work, and counseling emphasize the importance of utilizing research to inform treatment (American Counseling Association, 2014; APA, 2010; National Association of Social Workers, 2008).

Researchers (Lampropoulos, Schneider, & Spengler, 2009; Romans et al., 2010) have employed a variety of methods to investigate utilization and outcomes of college counseling services; psychometrically-supported instruments including the Counseling Center

Assessment of Psychological Symptoms ([CCAPS]; Center for Collegiate Mental Health [CCMH], 2013) and the Outcome Questionnaire-45 ([OQ-45]; Lambert et al., 2006; Romans et al., 2010) are examples of objective client feedback instruments that assist in monitoring a client’s progress in treatment. Researchers (Lampropoulos et al., 2009) have also analyzed the number of attended sessions and rates of premature or self-termination (“drop-out”), which occurs when a client and counselor do not mutually agree to end counseling (Hatchett, 2004). Approximately 20-25% of the students who attend a first appointment at college counseling centers do not return (Bean, 2006) and approximately 50% of clients self-terminate (Hatchett, 2004). This is of concern, as premature termination correlates with poorer outcomes, risk of suicidality, and a potential lack of clinically significant change (Hatchett, 2004).

In addition, IACS Standards (2010) required college counseling centers to consider the needs of minority students and tailor services accordingly. Researchers (Kearney, Draper, & Barón, 2005; Levy, Thompson-Leonardelli, Smith, & Coleman, 2002) found differences between minority and non-minority

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students seeking college counseling center services. For example, Kearney et al. (2005) found that African American, Latino, and Asian American students attended fewer sessions than European American students; Levy et al. (2002) found that African American students tended to terminate counseling prematurely. Locke et al. (2012) demonstrated that racial/ethnic minority students may present in greater distress. Additionally, minority status (racial/ethnic minorities or low socio-economic status) has predicted counseling dropout (Lampropoulos et al., 2009; Owen, Imel, Adelson, & Rodolfa, 2012). Taken together, these studies indicate that monitoring of utilization and outcomes of minority students is critical in order for college counseling centers to adapt services to meet needs better.

The proportion of college students with disabilities has increased since 1990 (Sanford, Newman, Wagner, Cameto, & Knokey, 2011), possibly due to the Americans with Disabilities Act of 1990 (ADA) and Americans with Disabilities Amendments Act of 2008 (ADAA) and resulting shifts in perceptions and accessibility (Burgstahler & Cory, 2008). According to the ADA, the definition of disability is twofold: an individual must have a physical or mental impairment, and the severity of the impairment must result in a substantial limitation of one or more life functions (APA, 2012). These laws granted equal access to information and services to people with disabilities in higher education. Holicky (2003) included disability as one category of diversity requiring consideration in counseling.

A review of the literature yielded few empirical studies of psychotherapy effectiveness for adults—especially college-aged adults—with disabilities. Glickman and Pollard (2013) suggested that the lack of research may be due to the paucity of specialized professionals and financial resources, the extent to which these professionals must dedicate their time to providing services directly to individuals with disabilities, and their lack of remaining time and resources to complete quality research. Although researchers (Dorstyn, Mathias, & Denson, 2011; Idusohan-Moizer, Sawicka, Dendle, & Albany, 2015; Weiss et al., 2012) studying Attention Deficit/Hyperactivity Disorder (ADHD), intellectual disabilities, and physical disabilities found that individuals with disabilities benefit from psychotherapy, no research exists describing the experience of college students with disabilities in college counseling.

Despite supportive legislation and increased enrollment, college students with disabilities continue to face a variety of barriers and stressors. In general, students with disabilities might experience chronic stress due to discrimination; specifically, they might encounter both overt discrimination and microaggressions (Keller & Galgay, 2010), subtle discrimination based on distorted assumptions/beliefs. Researchers (Murray, Lombardi, Bender, & Gerdes, 2013; Sanford et al., 2011) found that issues of access and adjustment to university life are reflected in higher course failure rates, lower retention rates, and lower graduation rates. Furthermore, individual abilities and disabilities can provide specific barriers and needs based on the type of disability. For example, students with physical disabilities commonly face environmental and accessibility challenges across multiple realms including built environment, outdoor campus environment, social and recreational services, and technological aids (Schreuer & Sachs, 2014). Similarly, college students with visual impairments face environmental challenges including difficulties with transportation, poor access to computer-based materials, social challenges, and limited accessibility of information and communication strategies (Fichten, Asuncion, Barile, Ferraro, & Wolforth, 2009; Reed & Curtis, 2012). Students who are deaf and hard-of-hearing commonly experience difficulty in carrying full course loads and dissatisfaction with social life (Lang, 2002).

There is significant overlap in the research when discussing mental health-related disabilities. For example, ADHD may be categorized separately, as a psychiatric disability, as a learning disability, or as a “hidden disability” (Wolf, 2001, p. 387) in the literature. Estimates of the prevalence of psychiatric disabilities on college campuses are as high as 30% (Hartley, 2010), while an estimated 86% of individuals who have a psychiatric disorder withdraw from college prior to completion of their degree (Collins & Mowbray, 2005). Barriers faced by college students with psychiatric disabilities include difficulty maintaining concentration, remembering important details, screening out distractions, and meeting deadlines under pressure. Additionally, issues with test anxiety, executive functioning, managing stigma, interacting within a group, responding to negative feedback, self-esteem, and acting appropriately with classmates and faculty can impact academic performance and personal well-being (Mowbray et al., 2006). Students

with ADHD and learning disabilities (LD) tend to have lower grade point averages and more academic issues; only 28% graduate (Connor, 2012; Costello & Stone, 2012). These students may struggle due to deficits in attention, planning and organization, memory, higher order conceptual thinking, self-esteem, and social skills (Wolf, 2001). Hartley (2010) demonstrated that counseling services are an effective support for this population. A close relationship with a counselor has been found to act as an anchor, helping students with psychiatric disabilities to remain in college; retention rates for undergraduates seeing counselors were 14% higher.

As the proportion of college students with disabilities continues to increase, there is a greater need for research examining college counseling services for this minority population. In an effort to assist college counseling center professionals in improving services for students with disabilities, and to increase awareness of students with disabilities as a diverse group with unique needs, the authors of the present study sought to answer the following research questions: (1) Do significant differences exist between students with and without disabilities related to the number of counseling sessions attended, and (2) Is there a statistically significant difference in termination condition between students with or without disabilities? Based on the findings of previous studies (Kearney et al., 2005; Lampropoulos et al., 2009; Levy et al., 2002; Owen et al., 2012) which demonstrated dissimilarities between minority and non-minority students seeking counseling center services, we hypothesized that there would be significant differences between students with and without disabilities on the number of sessions attended and the termination condition.

### **Research Design**

We based this non-experimental research study (Kerlinger & Lee, 2000) on analysis of secondary electronic medical record (EMR) data. We identified two pre-existing groups in an archived data set--individuals who self-identified as having one or more disabilities, and individuals who self-identified as not having a disability--and compared them based on termination condition and number of counseling sessions attended. We used a chi-square test for independence to make comparisons.

### **Hypotheses**

We tested two hypotheses in this study. First, participants with disabilities would have attended a statistically significantly lower number of counseling sessions than participants without disabilities. Second, there would be a statistically significant difference in termination condition between participants with disabilities and participants without disabilities; specifically, that participants with disabilities would be more likely to self-terminate than participants without disabilities. Due to the lack of research on college students with disabilities, we based our hypotheses on the work of researchers (Lampropoulos et al., 2009; Owen et al., 2012) who have found differences between minority and non-minority students in the number of sessions attended and in the termination condition.

### **Method**

#### **Participants**

In this study, we utilized secondary data from a sample of college students (N = 2,756) who sought services at a large, public, urban, Mid-Western college counseling center between August 2012 and August 2013. To utilize services, individuals were required to be enrolled as undergraduate or graduate students at the university. Table 1 illustrates demographic information for study participants, types of self-identified disability, as well select demographic information for overall enrollment in the university based on availability of data.

Compared with the overall university enrollment, female, African American, Asian American, Hispanic, Multi-racial, international, graduate, and disability groups were overrepresented in the study due to higher rates of presentation at the counseling center. Male, European American, and undergraduate students were underrepresented due to seeking services at slightly lower rates.

#### **Measures**

**Self-report of disability status.** For each participant, we categorized disability status by examining the EMR. During the intake process, students were asked to self-report disability status and type(s) of disability. No similar studies of college counseling centers were identified, thus, no precedent is established in the literature regarding how to distinguish between college students with disabilities and college students without disabilities.

**Number of sessions attended.** For each participant, we determined the number of individual and group counseling sessions attended via review of the EMR. We created the following categories to summarize the total number of sessions attended by participants: one kept appointment ( $n = 467$ , 18.4%); two or three kept appointments ( $n = 629$ , 24.7%); four to six kept appointments ( $n = 587$ , 23.1%); seven to ten kept appointments ( $n = 429$ , 16.9%); and 11+ kept appointments ( $n = 430$ , 16.9%). Modal number of appointments attended by students with and without disabilities was two-to-three appointments. These categories were selected because the average college counseling center client attends less than five counseling sessions (CCMH, 2014). In addition, we chose this method of categorization because group counseling appointments were included as part of participants' total sessions attended, and due to differences in limits for the total number of individual counseling sessions students could attend. For example, students were eligible for either 11, 21, or more sessions depending on enrollment in the student health insurance plan for the college. Lampropoulos et al. (2009) used the number of sessions attended as a means of assessing college counseling center utilization.

**Reason for termination.** We obtained each participant's reason for termination via EMR review. Possible categories of termination included: ongoing (counseling was not terminated and continued without interruption into the following academic year;  $n = 580$ , 22.8%), self-termination ( $n = 1,142$ , 44.9%), mutually agreed-upon client-counselor decision ( $n = 277$ , 10.9%), client left school due to graduation ( $n = 158$ , 6.2%), client left school due to dismissal or withdrew ( $n = 68$ , 2.7%), client left school for the summer ( $n = 133$ , 5.2%), client was referred outside the college counseling center for additional services ( $n = 63$ , 2.5%), session limit was reached ( $n = 55$ , 2.2%), or other ( $n = 66$ , 2.6%). In this study, we described premature termination using the category *self-termination*. Researchers (Hatchett, 2004; Lampropoulos et al., 2009) have utilized premature termination to evaluate counseling outcomes.

### Procedure

After gaining approval from the Institutional Review Board, we analyzed records from all enrolled college students who sought services at the college counseling center during the 2012-2013 academic year. These included total number of counseling

sessions attended, reason for termination, self-identified disability or non-disability status, and disability type, as extracted from the EMR. To ensure anonymity of participants, we retained de-identified data only for analysis.

All clients during the 2012-2013 academic year were included as study participants for demographic analyses. We conducted a chi-square test for independence to examine relationships between disability status, number of kept appointments, and termination condition. We excluded participants if data were missing in any of these categories.

### Analysis of Data

We performed inferential statistical analyses to evaluate differences between participants with disabilities and participants without disabilities based upon the number of counseling sessions attended ( $M = 1.89$ ,  $SD = 1.34$ ) and termination condition. We conducted a chi-square test for independence to examine relationships between disability status, number of kept appointments, and termination condition (Hypotheses 1 and 2).

### Results

We evaluated utilization of counseling services through descriptive statistics as percentage of students self-identifying as having a disability (9.2%) and percentage of students self-identifying as not having a disability (90.8%). Hypothesis 1 stated that participants with disabilities would have attended significantly fewer counseling sessions than participants without disabilities. Chi-square test for independence revealed no statistically significant differences in total number of sessions attended based on disability status [ $\chi^2(4) = 0.02$ ,  $p = 0.84$ ]. Hypothesis 2 stated that there would be a significant difference in termination condition between participants with disabilities and participants without disabilities. Specifically, participants with disabilities would be more likely to self-terminate than participants without disabilities. Chi-square test for independence revealed statistically significant differences in termination condition based on disability status [ $\chi^2(8) = 16.37$ ,  $p = .04$ ]. Table 1 indicates percentages based on disability status in each termination condition. The effect size for this finding ( $\phi = 0.1$ ) is small according to Cohen (1988).



## Discussion

In this study, we examined differences between college students with and without disabilities who utilized college counseling center services. Students with disabilities comprised 9.2% of total students who utilized counseling center services at a large, public, urban, Mid-Western university during the 2012-2013 academic year. Participants with disabilities identified that they fit into one or more of the following categories: ADHD ( $n = 88$ , 36.6% of participants with disabilities), deaf or hard of hearing ( $n = 7$ , 3.0%), learning ( $n = 24$ , 10.3%), mobility ( $n = 6$ , 2.6%), neurological ( $n = 11$ , 4.7%), physical ( $n = 21$ , 9.0%), psychological ( $n = 36$ , 15.4%), visual ( $n = 12$ , 5.1%), or other ( $n = 29$ , 12.4%).

Results did not support our first hypothesis that participants with disabilities would have attended fewer counseling sessions than participants without disabilities. Therefore, regardless of ability status, university students might attend approximately the same number of counseling sessions. This result might indicate that college counseling centers are serving students with disabilities similarly to students without disabilities. Furthermore, the extent to which college counseling centers are helpful to students may not vary based on whether a student has a disability.

Researchers who have examined treatment of adults with specific disabilities (ADHD, intellectual disabilities, physical disabilities) outside of college counseling have found that individuals can benefit from short-term therapies such as cognitive-behavioral therapy ([CBT]; Dorstyn et al., 2011; Idusohan-Moizer et al., 2015; Weiss et al., 2012), which are frequently offered at college counseling centers. Results of the current study might align with this research; college students with disabilities might benefit from brief treatment in college counseling centers.

Results of this study supported our second hypothesis, that there would be statistically significant differences in termination condition between participants with disabilities and participants without disabilities. This result aligns with findings by researchers (Lampropoulos et al., 2009; Owen et al., 2012) on other minority groups, indicating that minority students were more likely to self-terminate. Despite statistically significant findings regarding differences in termination condition, the effect size in this study was small, and accounts for only 1% of the total variance in outcomes.

We found that students with disabilities were more likely to self-terminate or “drop-out” of counseling. Specifically, 49.6% of students with disabilities self-terminated, whereas only 44.5% of students without disabilities self-terminated. Because premature termination correlates with poorer outcomes, risk of suicidality, and a potential lack of clinically significant change (Hatchett, 2004), this discrepancy appears to be important. Although we found differences between students with and without disabilities, the reason these students chose self-termination is unknown.

In this study, only 6% of students with disabilities terminated counseling because of a mutual client-counselor decision, while 11.4% of students without disabilities terminated because of a mutual client-counselor decision. While the reason for these differences is unknown, students with disabilities might have stopped attending sessions due to satisfaction with services; students may have experienced reduction in symptoms. Conversely, the 5.1% discrepancy between students with disabilities and students without disabilities might indicate that students with disabilities were less satisfied with the services they received, or might have been less comfortable speaking to their counselors about issues in their treatment.

If students with disabilities did self-terminate due to dissatisfaction, several factors might affect the increased likelihood of self-termination. They might have chosen not to return because of barriers to physical space or barriers to written information. In addition, self-termination might have been indicative of issues in the therapeutic relationship; issues such as lack of agreement on how to address important aspects of counseling predict poorer outcomes (Duncan, Miller, Wampold, & Hubble, 2010). Meta-analysis suggests that the weaker the therapeutic alliance, the more likely individuals are to drop out of psychotherapy (Sharf, Primavera & Diener, 2010). In addition, counseling center staff might have engaged in inadvertent microaggressions (Keller & Galgay, 2010), subtle discrimination based on distorted assumptions/beliefs, against students with disabilities. Microaggressions may manifest in a variety of ways including counselor attitudes, language, minimization of experience, and failure to implement universal design. Additional research is required to determine the actual reasons for self-termination.

Finally, we found that counselors referred 5.1% of clients with disabilities to external sources, where-

as only 2.2% of clients without disabilities were referred. We did not, however, examine the reasons for referring clients in this study. Clients might have requested these referrals, particularly if they were hoping to see a therapist specializing in a particular population, the discrepancy might have been coincidental, or there might have been difficulty accommodating large numbers of students at the counseling center. Counselors might have determined that the needs of these students could not be served adequately within a short-term therapy model. It is also possible that counselors might have referred students to outside providers because the counselors felt unprepared or less competent at meeting the needs of this unique population. Additional study is required to determine the reasons for these discrepancies.

### Limitations

Because no other studies have examined differences between college students with and without disabilities who utilized college counseling center services, conclusions based on this study are limited. In addition, the generalizability of this study might be limited because data came from only one college in one geographical location and because of the small effect size. Due to limited power, we were not able to refine results based on disability category or by other demographic factors (e.g., sexual orientation, gender). In addition, type of counseling provided (individual versus group) was not separated in this study; lack of separation might impact usefulness of this study for counseling centers. Furthermore, we explored neither student presenting concerns nor the therapeutic modality counselors utilized to treat clients in this study, which might impact results.

Self-report was relied upon to determine disability status in this study. Therefore, we could not be certain whether some students chose not to disclose disabilities, and/or whether some students had disabilities but were unaware of them. Additionally, reliance on self-report precluded the authors from discerning whether students disclosing disability status had been diagnosed by professionals. Lack of a professional diagnosis could account for the discrepancy in the number of study participants who self-identified as having a disability (234), but who were not registered with campus disability support services (179). Thus, there is potential for error in categorization of student ability status. Finally, because the term "disability" might

not be interpreted in the same manner universally, each individual might perceive and define disability differently.

### Recommendations for College Counseling Practice

**Increase awareness.** College counselors could serve students with disabilities better by maintaining an awareness of their minority status. Understanding and acknowledging that students who identify as having a disability are a minority population on college campuses should influence and inform treatment. For example, validating students' disabilities and exploring associated strengths and challenges, being aware of microaggressions, developing therapeutic alliance, and implementation of universal design (discussed in detail in the following section) can help to establish and maintain an awareness of minority status. All college counselors must be aware that assumptions (e.g., assuming an individual does not have a disability if a disability is not visible) and microaggressions (Keller & Galgay, 2010) are examples of discrimination. As recommended by IACS (2010) standards, counselors should use ongoing evaluation of services in order to determine the specific needs of this diverse group.

Development of a positive working alliance between the counselor and client is one of the best predictors of outcome (Duncan et al, 2003). Moreover, because client ratings of therapeutic alliance have a larger impact on outcomes than counselor ratings (Duncan et al., 2010), counselors must pay particular attention to the therapeutic alliance and monitor its quality regularly (Duncan et al., 2003). This is especially important when working with minority students who are more likely to self-terminate (Sharf et al., 2010). Self-termination is correlated with lack of clinically significant change, fewer positive outcomes of therapy, and increased risk of suicide (Hatchett, 2004). Using instruments such as the Session Rating Scale Version 3 ([SRS], Duncan, et al, 2010) college counselors can monitor the quality of the working alliance on a session by session basis.

**Advocate for universal design in college counseling centers.** According to federal law, students with disabilities must have equal access to physical space and information, also known as universal design (Burgstahler & Cory, 2008). To provide equal access, websites, physical office space (including reception areas, waiting areas, counselor offices, and restrooms), verbal communication, and written information must be accessible to students with a variety

of disabilities. Counselors should develop increased understanding of universal design and advocate for its implementation. College counselors must recognize that failure to implement universal design, because of the relatively few students with disabilities who utilize the services, results in the microaggression of Second-Class Citizenship: denying the right to equality because it is inconvenient, expensive, and unnecessary (Keller & Galgay, 2010).

**Increase multicultural training.** Goad and Robertson (2000) reported that, if college counseling centers offer training related to college students with disabilities, they tend to provide this training only to students and interns. Goad and Robertson recommend that all staff receive regular training on working with this minority population, similar to the focus college counseling centers might put on racial/ethnic minority students or international students. The APA (2012) *Guidelines for Assessment of and Intervention with Persons with Disabilities*, information about universal design (Burgstahler & Cory, 2008), and education about subtle discrimination (Keller & Galgay, 2010) are examples of important training content for counselors.

**Strengthen on-campus relationships.** Goad and Robertson (2000) recommended creating and/or strengthening liaison relationships between college counselors and campus disability services. On-campus disability services offices are rich in knowledge about the lived experiences of college students with disabilities and can often connect counselors with resources, provide training, and respond to specific questions. College counselors can benefit from consultation with campus disability services regarding how to assist students with disabilities best. Additionally, counselors can reach the greater campus community by providing targeted outreach that models disability-affirming language and universal design. College counselors are in a unique position to advocate for students with disabilities by providing training and education to other university employees, through both formal training and informal interactions.

### Suggestions for Future Research

Although results of the present study can begin to inform college counseling centers of potential differences between students with and without disabilities, additional research is required to capture the nature of this diverse group fully. Future studies could uti-

lize national and/or international samples from a variety of universities and could examine intersections of multiple minority statuses (e.g., African American students with disabilities). Larger participant pools would allow researchers to refine results by disability category and type of counseling provided (individual versus group). Future studies could consider the extent to which other client variables, such as the presenting problems of clients, might impact outcomes. The therapeutic modality counselors utilize to treat clients could also be explored to determine whether there are any differences in outcomes. Because of the link between premature termination and working alliance, future research could explore the working alliance and specific reasons for premature termination. To address the needs and challenges of counselors working with students with disabilities, future research could explore academic preparation, knowledge of lived experiences, and clinical experience with college students with disabilities.

Finally, because of the extensive gaps in the literature on college students with disabilities, qualitative studies might provide insight into experiences of students with disabilities, and those of the counselors who work with them. Additionally, qualitative research could explore any barriers to utilization of college counseling services and explore reasons for self-termination among this student population.

### Summary

In this study, we examined differences between college students with and without disabilities who utilized college counseling center services. Students with disabilities comprised 9.2% of those seeking services during the 2012-2013 academic year at one college counseling center. Although we found no differences between students with and without disabilities on the number of sessions attended, we found differences in termination condition based on ability status. Specifically, students with disabilities were more likely to self-terminate and less likely to terminate counseling because of a mutually agreed-upon client-counselor decision. Finally, we found that counselors referred clients with disabilities to external therapeutic resources more often than students without disabilities. Taken together, these results suggest that students with disabilities are a unique group and require special consideration by college counseling center staff.



## References

- American Counseling Association. (2014). *ACA code of ethics*.
- American Psychological Association. (2005). *Policy statement on evidence-based practice in psychology*.
- American Psychological Association. (2010). *American Psychological Association ethical principles of psychologists and code of conduct*.
- American Psychological Association. (2012). Guidelines for assessment of and intervention with persons with disabilities. *American Psychologist*, 67, 43-62.
- Bean, M. C. (2006). Choosing not to return: Diverse students' intake experiences at a university counseling center. Dissertation Abstracts International: Section B. *Sciences and Engineering*, 66(7-B), 3938.
- Burgstahler, S., & Cory, R. (Eds.). (2008). *Universal design in higher education: From principles to practice*. Boston, MA: Harvard Education Publishing Group.
- Center for Collegiate Mental Health (2013). *Clinician's guide to the counseling center assessment of psychological symptoms*. University Park, PA: The Pennsylvania State University.
- Center for Collegiate Mental Health. (2014, January). *2013 annual report* (Publication No. STA 14-43).
- Cohen, J. (1988). *Statistical power analysis for the behavioural sciences* (2nd ed.). New York: Academic Press.
- Collins, M. E., & Mowbray, C. T. (2005). Higher education and psychiatric disabilities: National survey of campus disability services. *American Journal of Orthopsychiatry*, 75, 304-315.
- Connor, D. (2012). Helping students with disabilities transition to college: 21 tips for students with LD and/or ADD/ADHD. *Teaching Exceptional Children*, 44(5), 16-25.
- Costello, C. A., & Stone, S. L. (2012). Positive psychology and self-efficacy: Potential benefits for college students with attention deficit hyperactivity disorder and learning disabilities. *Journal of Postsecondary Education and Disability*, 25, 119-129.
- Dorstyn, D. S., Mathias, J. L., & Denson, L. A. (2011). Psychosocial outcomes of telephone-based counseling for adults with an acquired physical disability: A meta-analysis. *Rehabilitation Psychology*, 56, 1-14.
- Duncan, B. L., Miller, S. D., Sparks, J. A., Claud, D. A., Reynolds, L. R., Brown, J., & Johnson, L. D. (2003). The session rating scale: Preliminary psychometric properties of a "working" alliance measure. *Journal of Brief Therapy*, 3, 1, 3-12.
- Duncan, B. L., Miller, S. D., Wampold, B. E., & Hubble, M. A. (Eds.). (2010). *The heart & soul of change: Delivering what works in therapy* (2nd ed.). Washington, DC: American Psychological Association.
- Fichten, C. S., Asuncion, J. V., Barile, M., Ferraro, V., & Wolforth, J. (2009). Accessibility of e-learning and computer and information technologies for students with visual impairments in postsecondary education. *Journal of Visual Impairment & Blindness*, 103, 543-557.
- Glickman, N. S., & Pollard, R. Q. (2013). Deaf mental health research: Where we've been and where we hope to go. In N. Glickman (Ed.), *Deaf mental health care*. New York, NY: Routledge.
- Goad, C. J., & Robertson, J. M. (2000). How university counseling centers serve students with disabilities: A status report. *Journal of College Student Psychotherapy*, 14(3), 13-22.
- Goodheart, C. D., Kazdin, A. E., & Sternberg, R. J. (2006). *Evidence-based psychotherapy: Where research and practice meet*. Washington, DC: American Psychological Association.
- Hartley, M. T. (2010). Increasing resilience: Strategies for reducing dropout rates for college students with psychiatric disabilities. *American Journal of Psychiatric Rehabilitation*, 13, 295-315.
- Hatchett, G. T. (2004). Reducing premature termination in university counseling centers. *Journal of College Student Psychotherapy*, 19(2), 13-27.
- Holicky, R. (2003). Counseling people with physical disabilities. In N. A. Vacc, S. B. DeVaney, & J. M. Brendel (Eds.), *Counseling multicultural and diverse populations* (4th ed., pp. 209-229). New York, NY: Routledge.
- Idusohan-Moizer, H., Sawicka, A., Dendle, J., & Albany, M. (2015). Mindfulness-based cognitive therapy for adults with intellectual disabilities: An evaluation of the effectiveness of mindfulness in reducing symptoms of depression and anxiety. *Journal of Intellectual Disability Research*, 59.

- International Association of Counseling Services. (2010, October). *Standards for university and college counseling services*.
- Kearney, L. K., Draper, M., & Barón, A. (2005). Counseling utilization by ethnic minority college students. *Cultural Diversity and Ethnic Minority Psychology, 11*(3), 272-285.
- Keller, R. M., & Galgay, C. E. (2010). Microaggressive experiences of people with disabilities. In D. W. Sue (Ed.), *Microaggressions and marginality: Manifestation, dynamics, and impact* (pp. 241-268). Hoboken, NJ: Wiley.
- Kerlinger, F. N., & Lee, H. B. (2000). *Foundations of behavioral research* (4th ed.). Belmont, CA: Cengage Learning.
- Lambert, M. J., Smart, D. W., Campbell, M. P., Hawkins, E. J., Harmon, C., & Slade, K. L. (2006). Psychotherapy outcome as measured by the OQ-45, in African American, Asian/Pacific Islander, Latino/a, and Native American clients compared with matched Caucasian clients. *Journal of College Student Psychotherapy, 20*(4), 17-29.
- Lampropoulos, G. K., Schneider, M. K., & Spengler, P. M. (2009) Predictors of early termination in a university counseling training clinic. *Journal of Counseling & Development, 87*, 36-46.
- Lang, H. G. (2002). Higher education for deaf students: Research priorities in the new millennium. *Journal of Deaf Studies and Deaf Education, 7*, 267-280.
- Levy, J., Thompson-Leonardelli, K., Smith, N., & Coleman, N. (2002). *How client race, presenting concern, and time on the waiting list relate to attrition after intake at a university counseling center* (p. 265). Counseling center research report, University of Maryland, College Park.
- Locke, B. D., Bieschke, K. J., Castonguay, L. G., & Hayes, J. A. (2012). The Center for Collegiate Mental Health: Studying college student mental health through an innovative research infrastructure that brings science and practice together. *Harvard Review of Psychiatry, 20*, 233-45.
- Mowbray, C. T., Megivern, D., Mandiberg, J. M., Strauss, S., Stein, C. H., Collins, K., Kopels, S., Curlin, C., & Lett, R. (2006). Campus mental health services: Recommendations for change. *American Journal of Orthopsychiatry, 76*, 226-276.
- Murray, C., Lombardi, A., Bender, F., & Gerdes, H. (2013). Social support: Main and moderating effects on the relation between financial stress and adjustment among college students with disabilities. *Social Psychology of Education, 16*, 227-295.
- National Association of Social Workers. (2008). *Code of ethics of the National Association of Social Workers*.
- Ohio State University, Institutional Research & Planning. (2012). *Statistical summary*.
- Owen, J., Imel, Z., Adelson, J., & Rodolfa, E. (2012). 'No-show': Therapist racial/ethnic disparities in client unilateral termination. *Journal of Counseling Psychology, 59*, 314-320.
- Reed, M., & Curtis, K. (2012). Experiences of students with visual impairments in Canadian Higher Education. *Journal of Visual Impairment and Blindness, 106*, 414-425.
- Romans, J. S., White, J. K., Harrist, R. S., Boswell, D. L., Sims, W. D., & Murn, L. T. (2010). Predicting attrition from counseling in a university counseling center sample using the Outcome Questionnaire-45.2. *Internet Journal of Mental Health, 7*.
- Sanford, C., Newman, L., Wagner, M., Cameto, R., Knokey, A., Shaver, D. (2011). *The post-high school outcomes of young adults with disabilities up to 6 years after high school: Key findings from the National Longitudinal Transition Study-2 (NLTS2)* (NCSE Report 3004).
- Schreuer, N., & Sachs, D. (2014). Efficacy of accommodations for students with disabilities in higher education. *Journal of Vocational Rehabilitation, 40*, 27-40.
- Sharf, J., Primavera, L. H., & Diener, M. J. (2010). Dropout and therapeutic alliance: A meta-analysis of adult individual psychotherapy. *Psychotherapy: Theory, Research, Practice, Training, 47*, 637-645.
- Weiss, M., Murray, C., Wasdell, M., Greenfield, B., Giles, L., & Hechtman, L. (2014). A randomized controlled trial of CBT therapy for adults with ADHD with and without medication. *BMC Psychiatry, 12*. Advance online publication.
- Wolf, L. E. (2001). College students with ADHD and other hidden disabilities. *Annals of the New York Academy of Sciences, 931*, 385-395.

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### Acknowledgement

This research was conducted at Counseling and Consultation Services in the Office of Student Life at The Ohio State University, Columbus, Ohio.

Table 1

*Sample Characteristics*

	Sample Frequency (percent)	University Frequency (percent)
<b>Total</b>	<b>2,756 (4.8)</b>	<b>56,387</b>
<b>Gender</b>		
Male	1,690 (61.3)	29,038 (51.2)
Female	1,011(36.7)	27,349 (48.5)
Trans	14 (.5)	
No response	41 (1.5)	
<b>Sexual Orientation</b>		
Heterosexual	2,276 (82.6)	
Lesbian	53 (1.9)	
Gay	86 (3.1)	
Bisexual	136 (4.9)	
Questioning	44 (1.6)	
<b>Race/Ethnicity</b>		
African American	214 (7.8)	3,261 (5.8)
American Indian/Alaskan Native	7 (.3)	118 (.2)
Asian American	225 (8.2)	3,041 (5.4)
European American/White	1,966 (71.3)	47,120 (84.6)
Hispanic/Latino/a	101 (3.7)	1,746 (3.1)
Native Hawaiian / Pacific Islander	2 (.1)	35 (.1)
Multi-racial	95 (3.4)	1,066 (1.9)
No response	87 (3.2)	
Other	59 (2.1)	
<b>Academic Status</b>		
Undergraduate student	1,883 (68.3)	43,058 (75.1)
Graduate student	740 (26.9)	14,329 (24.9)
No response	133 (4.8)	
<b>Country of Origin</b>		
USA	2,341 (84.9)	51,359 (89.4)
International	415 (15.1)	6,028 (10.6)
<b>Disability Status</b>		
No disability	2,308 (90.8)	55,953 (97.5)
At least one disability	234 (9.2)	1,434 (2.5)
Registered with ODS	179 (6.5)	



Table 1, *continued*

<b>Type of Disability</b>	
ADHD	88 (36.6)
Deaf or hard of hearing	7 (3.0)
Learning	24 (10.3)
Mobility	6 (2.6)
Physical	21 (9.0)
Neurological	11 (4.7)
Psychological	36 (15.4)
Visual	12 (5.1)
Other	29 (12.4)

Table 2

*Termination Condition by Disability Status*

	No Disability ( <i>n</i> = 2,308)	Disability ( <i>n</i> = 234)
Ongoing	23.2%	19.2%
Self-termination	44.5%	49.6%
Mutually agreed-upon client-counselor decision	11.4%	6.0%
Left school: graduated	6.1%	7.3%
Left school: dismissed / withdrew	2.7%	2.6%
Left school: summer	5.2%	5.1%
Referred out	2.2%	5.1%
Session limit reached	2.1%	2.6%
Other	2.6%	2.6%

*Note.* % within Disability status